MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2022/2023 (TERM ID 2215)

DBM5024 BUSINESS FINANCE

(All Sections/Groups)

20th FEBRUARY 2023
2.30 p.m – 4.30 p.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 8 pages (excluding the cover page and formula appendix) with 2 sections.

2. Attempt **ALL** questions in Section A and Section B. The distribution of the marks for each question is given.

3. Please write all your answers for Section A on the OMR form provided and all answers for Section B in the Answer Booklet provided.

4. The formulae are given in the appendices.

SECTION A: Multiple Choice Questions (30 Marks)

1. Irfan needs to get advice on investment matter, so he goes to the investment bank to get it. Which basic area of finance this situation is referring to?

   A. International finance.
   B. Financial institution.
   C. Corporate finance.
   D. Offshore banking.

2. Chia Chee works in MMU's finance department. Her duty as a _____, where she is dealing with taxes and all the accounting works.

   A. controller
   B. tax collector
   C. treasurer
   D. chief financial officer

3. Bei Tian needs to know _____ knowledge so that she will be able to manage the company's day-to-day finances.

   A. capital budgeting
   B. capital structure
   C. capital financing
   D. working capital management

4. Bei Yun owns a Korean BBQ Restaurant. He always dreams to open a bigger restaurant when he started the business, but he has limited capital. Based on this situation, what form of business Bei Yun is in?

   A. Corporation.
   B. Limited liability partnership.
   C. Sole proprietorship.
   D. General partnership.

5. Which of the following is the goal of a corporation?

   A. Minimise the current value per share of the company's existing stock.
   B. Minimise the market value of the future owner's equity.
   C. Maximise the current value per share of the company's existing stock.
   D. Maximise the future value per share of the company's past stock.

Continued ...

6. In terms of personal finance, what can an individual do if he/she has the knowledge of finance?

   A. Marketing research.
   B. Retirement planning.
   C. Evaluating job performance.
   D. Preparation of financial statements.

7. _____ is referring to the speed and ease of conversion to cash without a significant loss of value.

   A. Liquidity
   B. Derivative
   C. Feasibility
   D. Equity

8. Shi Le who is new to investment, must look into the _____ of an asset in order to identify the true value of the underlying asset before making the purchased.

   A. book value
   B. market value
   C. underlying value
   D. specific value

9. Which of the following defines the function of an income statement?

   A. The income statement measures the performance of the company over a specified period of time.
   B. The income statement recognise the revenue of the company when it is fully earned and match it with the expenses.
   C. The income statement shows how cash is generated from borrowing money.
   D. The income statement shows the historical value of an asset.

10. Luqman Sdn Bhd has stated a long-term debt of RM650. Its current liability is RM150 and cost of goods manufactured is RM10. Calculate the total liability of this company.

    A. RM220.
    B. RM620.
    C. RM800.
    D. RM980

Continued ...

11. Mahatir wants to know the amount of total tax paid on his taxable income of RM6,000. Based on the data below, calculate the total tax paid.

Taxable Income (RM)	Tax Rate (%)
0 – 3,000	10
3,001 – 6,000	5
6,001 – 9,000	8
9,001 – 12,000	7

A. RM450.
B. RM500.
C. RM300.
D. RM660.

12. The financial statements of Sim Yu Hang Enterprise show a depreciation expense of RM5,000 and interest expenses of RM300 for the year. The statement also indicates the ending net fixed asset at RM8,000 and the beginning net assets is RM5,000. What is the amount of the net capital spending for the year?

A. RM6,000.
B. RM8,000.
C. RM9,800.
D. RM21,000.

13. Ailee plans to invest RM55 today with an interest of 5 percent. This will enable her to received RM255 in 10 years' time. The amount RM55 is referring to the _____.

A. true value
B. future value
C. present value
D. interest on interest value

14. Uthaya is planning to invest RM500 for 5 years. Which of the following investment plan will give her the highest future value?

A. 5 percent interest that compounded quarterly.
B. 10 percent of simple interest.
C. 8 percent of simple interest.
D. 5 percent interest that compounded semiannually.

Continued ...

15. In a normal practice by banks, they will pay simple interest on a savings account. This means the bank will _____.
    A. pay an interest on interest
    B. pay an interest on the initial principal amount
    C. pay an interest on the reinvested amount
    D. pay an interest on the beginning of the investment period only

16. The interest rate used to compute the present value of a future cash flow is called the _____.
    A. marginal rate
    B. simple rate
    C. compounding rate
    D. discount rate

17. Given a higher time period, the present value of an investment will always _____.
    A. increases
    B. decreases
    C. remain constant
    D. equal to zero

18. Mr. John wants to buy a new furniture for his grandfather. He currently has RM3,000 and the furniture costs RM8,000. If he can earn a 15 percent interest on an investment, how long will he have to wait in order to get the RM8,000?
    A. 5 years.
    B. 7.02 years.
    C. 11 years.
    D. 15.55 years.

19. Venice received Yayasan Peneraju Scholarship that will pay her RM2,000 a month starting today, and continue for 5 years. Which of the following describes this situation?
    A. Annuity due.
    B. Perpetuity.
    C. Consolidation.
    D. Ordinary annuity.

Continued ...

20. _____ is an interest rate that expressed as if it were compounded once per year.

A. Annual percentage rate
B. Nominal rate
C. Effective annual rate
D. Infinite discount rate.

21. Yeo Boon Li Inc. decided to save money each year for the next 3 years to help fund for a new project. If it earns 15 percent on its savings, how much will the firm accumulate at the end of year 3?

Year	Amount saved
1	RM15,000
2	RM8,000
3	RM10,000

A. RM25,855.50.
B. RM39,037.50.
C. RM40,000.
D. RM75, 000.

22. Jun Yang has a project that will produce an annual cash flow of RM10,000 a year for 5 years. The company requires a 10 percent rate of return. What will be the present value annuity for this project?

A. RM18,200.66
B. RM25,500.00
C. RM37,907.87
D. RM48,800.00

23. A preferred stock pays an annual dividend of RM45. What is one share of this stock worth to you today if you require a 25 percent rate of return?
A. RM90.00
B. RM125.50
C. RM173.00
D. RM180.00

24. What will be the Annual Percentage Rate (APR) for a loan that has a compound interest semiannually of 15 percent?

A. 1.88 percent.
B. 4.24 percent.
C. 4.80 percent.
D. 5.66 percent.

Continued ...

25. Which one of the following best defines the term 'credit scoring'?

    A. Categorising customers into groups depending upon the length of time it takes each customer to pay for purchases.
    B. Compiling a list of account receivables segregated by the length of time each receivable has been outstanding.
    C. Evaluating the opportunity costs of a credit policy.
    D. Process of quantifying the probability of default when granting credit to customer.

26. Which one of the following is a speculative motive for holding cash?

    A. Buying extra inventory because a key supplier offered a special one-time discount.
    B. Paying a RM100 bonus to employees at year end.
    C. Paying the annual insurance premium on the firm's assets.
    D. Needing to purchase a new delivery truck because the old one was totally destroyed in an accident.

27. Min Yi wrote a check for RM88 on Friday, August 22. The bank cleared the check on Wednesday, August 27. There were no other checks or deposits outstanding during the month. Given this, which one of the following statements is **CORRECT**?

    A. On August 22, the available balance was RM88 less than the ledger balance.
    B. On August 27, the ledger balance was RM88 less than the available balance.
    C. On August25, the available balance increased by RM88.
    D. On August 22, the ledger balance was RM88 less than the available balance.

28. Cash concentration accounts means _____.

    A. eliminate the need for lockboxes.
    B. decrease a firm's disbursement float by reducing mail and processing delays.
    C. allow firms to more efficiently handle cash.
    D. tend to decrease a firm's investment income.

29. For which one of the following instruments does a bank guarantee payment by the buyer?

    A. Money market preferred stock.
    B. Commercial paper.
    C. Banker's acceptance.
    D. Invoice.

Continued ...

30. Ada Kueh Bakery sells 8,000 donuts a year at an average price per donut of RM8. The carrying cost per unit is RM2.50. The company orders 100 donuts at a time and has a fixed order cost of RM30 per order. The donuts are sold out before they are restocked. What is the economic order quantity?

    A. 438 donuts.
    B. 555 donuts.
    C. 765 donuts.
    D. 888 donuts.

(Total: 30 marks)

SECTION B: STRUCTURED QUESTIONS (70 marks)

QUESTION 1

Jarvis Ptd Ltd has 10,000 shares of common stock outstanding at a price per share of RM80 and a rate of return of 10%. The firm has 8,000 shares of 8% preferred stock outstanding at a price of RM58 a share. The preferred stock has a par value of RM100. The outstanding debt has a total face value of RM200,000 and currently sells for 105% of face value. The yield to maturity on the debt is 9%. What is the firm's weighted average cost of capital (WACC) if the tax rate is 25%? (12.5 marks)

(Total: 12.5 marks)

QUESTION 2

State the **FOUR (4)** differences between debt and equity. (8 marks)

(Total: 8 marks)

QUESTION 3

2021 is a good financial year for Claudia Sdn Bhd. They have announced to increase their dividend by 10% in year 1, 15% in year 2, 8% in year 3, 12% in year 4 and 10% in year 5. Thereafter, the dividends will increase by 20%. The company has paid the dividend of RM1.00 per share last year. The required rate of return for this stock is 25%. What is the current value of the stock? (19 marks)

(Total: 19 marks)

Continued ...

QUESTION 4

BIGHIT Corporation is planning to take a project with the initial investment of RM85,000. The required rate of return is 15%. The company is expected to receive a cash flow from the project as per below. Calculate the net present value and decide whether this project will be accepted or rejected. (9.5 marks)

Year	1	2	3	4	5
Net income	RM20,000	RM50,000	RM30,000	RM25,000	RM18,500

(Total: 9.5 marks)

QUESTION 5

Joslyn Sdn. Bhd. has stated a bond face value of RM1,000. Coupon payment is stated at 15% semiannually. Their bond pays interest annually and will mature in 8 years. It also has a yield to maturity of 15% compounded semiannually. Calculate the below: -

i. Bond value. (6 marks)

ii. Current yield (2 marks)

(Total: 8 marks)

QUESTION 6

Amirul is borrowing RM30, 000 for 4 years with an Annual Percentage Rate of 8.5 percent. The loan calls for the principal balance to be reduced by equal amounts over the life of the loan. He makes a single fixed payment every year with the interest is being paid in full each year. Prepare the amortization table schedule. (13 marks)

(Total: 13 marks)

End of Paper

Appendices

I. Symbols
PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future
r = Interest rate, rate of return, or discount rate per period typically , but not always, one year
t = Number of periods typically , but not always, the number of years
C = Cash amount

II. **Future value of C invested at r percent per period for t periods**
$FV_t = C \times (1 + r)^t$
The term $(1 + r)^t$ is called the *future value factor.*

III. **Present value of C to be received in t periods at r percent per period**
$PV = C/(1 + r)^t$
The term $1/(1 + r)^t$ is called the *present value factor.*

IV. **The basic present value equation giving the relationship between present and future value is**
$PV = FV_t/(1 + r)^t$

I. Symbols
PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future at time t
r = Interest rate, rate of return, or discount rate per period—typically, but not always, one year
t = Number of periods—typically, but not always, the number of years
C = Cash amount

II. **Future value of C invested per period for t periods at r percent per period**
$FV_t = C \times [(1 + r)^t - 1]/r$
A series of identical cash flows paid for a set number of periods is called an annuity, and the term $[(1 + r)^t - 1]/r$ is called the *annuity future value factor.*

III. **Present value of C per period for t periods at r percent per period**
$PV = C \times \{1 - [1/(1 + r)^t]\}/r$
The term $\{1 - [1/(1 + r)^t]\}/r$ is called the *annuity present value factor.*

IV. **Present value of a perpetuity of C per period**
$PV = C/r$
A perpetuity has the same cash flow every period forever.

I. Finding the value of a bond

Bond value = $C \times [1 - 1/(1 + r)^t]/r + F/(1 + r)^t$

where

C = Coupon paid each period
r = Rate per period
t = Number of periods
F = Bond s face value

II. Finding the yield on a bond

Given a bond value, coupon, time to maturity, and face value, it is possible to find the implicit discount rate, or yield to maturity, by trial and error only. To do this, try different discount rates in the formula above until the calculated bond value equals the given bond value. Remember that increasing the rate *decreases* the bond value.

I. The general case

In general, the price today of a share of stock, P_0, is the present value of all of its future dividends, D_1, D_2, D_3, . . . :

$$P_0 = \frac{D_1}{(1 + R)^1} + \frac{D_2}{(1 + R)^2} + \frac{D_3}{(1 + R)^3} + \cdots$$

where R is the required return.

II. Constant growth case

If the dividend is constant and equal to D, then the price can be written as:

$$P_0 = \frac{D}{R}$$

If the dividend grows at a steady rate, g, then the price can be written as:

$$P_0 = \frac{D_1}{R - g}$$

This result is called the *dividend growth model*.

III. Nonconstant Growth

If the dividend grows steadily after t periods, then the price can be written as:

$$P_0 = \frac{D_1}{(1 + R)^1} + \frac{D_2}{(1 + R)^2} + \cdots + \frac{D_t}{(1 + R)^t} + \frac{P_t}{(1 + R)^t}$$

where

$$P_t = \frac{D_t \times (1 + g)}{(R - g)}$$

IV. Valuation Using Multiples

For stocks that don't pay dividends (or have erratic dividend growth rates), we can value them using the PE ratio and/or the price-sales ratio:

P_t = Benchmark PE ratio × EPS_t
P_t = Benchmark price-sales ratio × Sales per share$_t$

V. The required return, R, can be written as the sum of two things:

$$R = D_1/P_0 + g$$

where D_1/P_0 is the *dividend yield* and g is the *capital gains yield* (which is the same thing as the growth rate in dividends for the steady growth case).

I. **The cost of equity, R_E**
   A. Dividend growth model approach (from Chapter 7):

      $$R_E = D_1/P_0 + g$$

      where D_1 is the expected dividend in one period, g is the dividend growth rate, and P_0 is the current stock price.
   B. SML approach (from Chapter 11):

      $$R_E = R_f + \beta_E \times (R_M - R_f)$$

      where R_f is the risk-free rate, R_M is the expected return on the overall market, and β_E is the systematic risk of the equity.

II. **The cost of debt, R_D**
   A. For a firm with publicly held debt, the cost of debt can be measured as the yield to maturity on the outstanding debt. The coupon rate is irrelevant. Yield to maturity is covered in Chapter 6.
   B. If the firm has no publicly traded debt, then the cost of debt can be measured as the yield to maturity on similarly rated bonds (bond ratings are discussed in Chapter 6).

III. **The weighted average cost of capital, WACC**
   A. The firm's WACC is the overall required return on the firm as a whole. It is the appropriate discount rate to use for cash flows similar in risk to the overall firm.
   B. The WACC is calculated as:

      $$\text{WACC} = (E/V) \times R_E + (D/V) \times R_D \times (1 - T_C)$$

      where T_C is the corporate tax rate, E is the *market* value of the firm's equity, D is the *market* value of the firm's debt, and $V = E + D$. Note that E/V is the percentage of the firm's financing (in market value terms) that is equity, and D/V is the percentage that is debt.